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ABSTRACT

The document describes how high school social studies teachers can replace existing traditional classroom activities with an archaeology field experience. The objectives are to relate the social and physical sciences and to provide evidence not only of spectacular historical events, but also of the daily lives of ordinary people. Although an archaeological dig is often mistakenly viewed as an endeavor only for the highly trained, the document reassures teachers that many workers, often only slightly skilled and barely trained are required to do the work of archaeology (under the supervision of an experienced archaeologist). Planning for an archaeological dig differs from planning any other extended field trip in that students step into the real world of archaeology rather than a simulated situation. The document gives guidelines for selecting an archaeologist and dig site and for preparing students for a dig. Essential equipment and materials, agencies to contact for assistance, and necessary personal items are listed. The final section attends to the educational aspects of developing goals and objectives, planning introductory sessions, assigning student responsibilities, providing structure for learning, and planning summary activities to bring closure to the experience. (LH)

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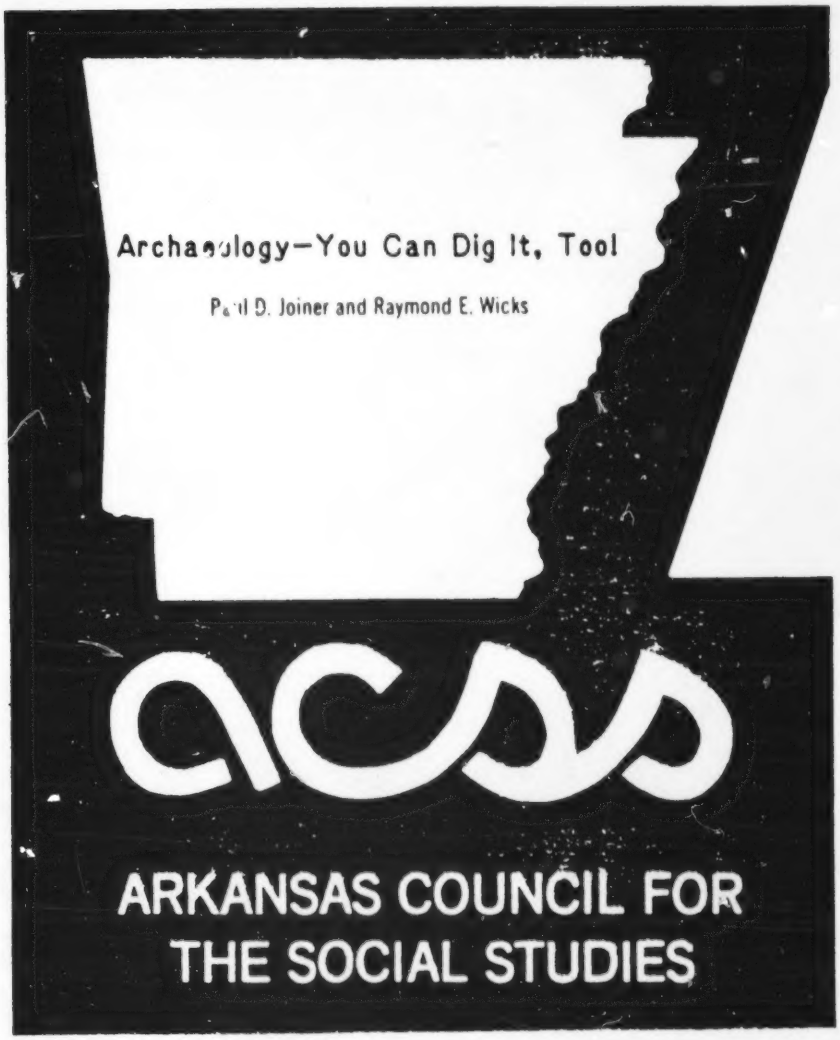

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The Arkansas Social Studies Teacher

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Archaeology—You Can Dig It, Too!

Paul D. Joiner and Raymond E. Wicks
McGill-Toolen High School, Mobile, Alabama

The day's work had yielded nothing but tired backs from moving what seemed to be tons of earth. Suddenly, someone stopped digging, reached over and picked up a small object. She looked at it from all angles, trying to decide what it was. A look of excitement could be seen in her eyes as she walked over to the archaeologist. "Look what I found! What is it?" she asked, hoping that it was the key to the entire project. Her first "discovery" of the dig was unmomentous. It was simply a piece of heated clay called "daub," a very common substance to be found at a 16th century Indian village site. Eventually, however, she would uncover and excavate an Indian burial, one of twenty-two discovered at this site in a farmer's field in central Alabama.[1]

This story illustrates the excitement that can be a part of social studies education. However, for many teachers, social studies simply means teaching a traditional course in American history, govern-

ment, world history, or some other state-required subject. Too often, the excitement is only generated by the personality of the teacher, and the novelty from an occasional movie. The only connection that the class may have with the world outside of the classroom is the too-few minutes spent on current events. It doesn't have to be this way. However, more often than not, teachers fail to realize that social studies is comprised of various interrelated disciplines which deal with man as a social being, and they fail to impart this notion to their students. Although the curriculum is composed of discrete subjects, the relationship of social studies courses to man's past and present can successfully be conveyed to students. Consider the study of history as an example. History is the interpreting and reporting of man's past. Without contributions from many other social and physical sciences, the knowledge of earlier centuries would be much less complete than it is. History, therefore, provides teachers with an ever-present opportunity to demonstrate to students the interrelatedness and relevance of social studies.

To accomplish this feat, social studies teachers can introduce their students to the study of archaeology. Of all the social sciences, archaeology is, in many ways, the most fundamental in accurately recording history. As an integral part of historical interpretation, archaeology has contributed greatly to the knowledge of pre-historic and modern civilizations. Remains of habitation from millions of years ago have been uncovered by archaeologists in Tanzania; but an inner-city's piles of rubble in vacant lots can also contribute to knowledge of the human condition. Archaeology provides the evidence of the very origins of man's existence, and it fleshes out the skeleton of recorded history which has been left in written or pictorial form. What has been chronicled is often only the spectacular or the tragic, the events in the lives of kings, and high priests, and generals. But what of the daily lives of the ordinary people, the drudgery that is the vast expanse of life, and what of the legends for which there is no physical evidence. And what answer is given to the student who is not satisfied with a mere verbal description? Through archaeology the historical vaults of the earth can be opened to provide some of the answers.

No classroom activity, however, can create for the student a confrontation with history like that which can result from a field experience. Archaeology in the classroom is only one more instance of passive students encountering subject matter. An archaeology field experience makes them participants in the past. On a dig, students are not only able to see evidence of the past, they are able to touch it as well. Pieces of pottery, bone fragments, projectile points, and even the remains of charred wood open the students' minds to the real-life drama of history. No longer is it abstract; through these objects the students can recreate the events of the past. Their imaginations can transport them to an earlier time, a time when those broken artifacts in their hands were part of the lives of people not too different from themselves. After an exam, they may forget facts that they learned from classroom lectures, and they may even forget entire episodes in history. The student will not, however, be able to forget their excursion into the past by way of the time machine known as archaeology.

Although archaeology has a great deal of appeal for many people, especially social studies teachers, it is often viewed as an endeavor only for the highly trained, immensely patient, and intensely observant. However, the majority of an archaeologist's efforts are spent in moving tons of earth, measuring, marking, sketching, and recording. Of all the time that he devotes to his work, only a miniscule amount results in brilliant discoveries. The excitement is largely intellectual, and practitioners rarely experience the perils of the adventurous "Indiana Jones." Teachers today, however, can capitalize on the current popularity of the film "Raiders of the Lost Ark" and Jones, its archaeologist-hero, to interest students in the art and science of uncovering the past.

Archaeology is part science, part deduction, and part inference. It requires a great deal of patience, a significant expenditure of physical labor, and a knowledge of the human condition. It relies on many facets of the social and physical sciences in order to accomplish its goals of recreating the past by forcing the earth to divulge the secrets of earlier civilizations. It requires many workers, often only slightly skilled and barely trained, to do the work of archaeology. Rarely is an archaeological site large enough or sufficiently funded to warrant the presence of more than one archaeologist. The fact that many willing workers are needed to accomplish the task should only encourage teachers to involve themselves and their students in a dig experience.

Planning for an archaeological dig is similar to preparing for any other extended field trip. It is not

significantly different from the active involvement that might be required of students on a science field study. What is significantly different from field work planned and directed by a classroom teacher is that the students on a dig step into the **real world** of archaeology. This is not a simulated situation designed as an instructional tool. On a dig, students and teachers work under the direction of a professional archaeologist at an excavation site which will contribute to man's knowledge about his past. They will participate in an apprenticeship in the world of applied social studies, and this invaluable experience will be further enhanced by the excitement of discovery.

Obviously, such an undertaking must be preceded by a great deal of planning and preparation. By following a few simple guidelines, however, teachers and students can be involved in one of the supreme experiences of social studies, literally uncovering the past. The first ingredients for a successful dig are, of course, a site and an experienced archaeologist. Without either of these, the project cannot take place. Of the two, the archaeologist should be the first item on the list.

In locating an archaeologist several considerations must be kept in mind. First, the archaeologist must possess the proper credentials and he must be reliable and skilled in the profession. Remember, this experience must be both educational and safe. Secondly, many archaeologists support themselves during the summer with grant money from state, federal, private, or university sources. There is generally a time limit placed on these projects, and, as a consequence, there may not be time in every project to teach archaeology to high school students. Thirdly, not every archaeologist has the personality needed to cope with fifteen or twenty teenagers involved in their first dig. This does not mean that the person in question is not a reputable archaeologist, it simply means that he is not a high school teacher. It must also be remembered that archaeologists, like any other professional, are involved with their work and do not mind working around the clock on an interesting project. High school students cannot be expected to keep pace with a professional.

Archaeologists may be recommended from various sources. The obvious one is the local university. If they have a resident archaeologist, there may be a project each summer. On a small campus, an archaeologist may be a member of the Sociology Department, but if there is also an Anthropology Department, this should be the first place contacted. Another source for professional archaeologists is the state historical commission. Frequently, state funds for archaeology projects are controlled by that agency, and it should have a listing of all sites in the state and the project directors. Another excellent source of information is the Archaeology Institute of America (53 Park Place, Room 802, New York, NY 10007). The Institute publishes an annual bulletin which lists sites and directors throughout the United States.

The dig site usually comes with the archaeologist, for it is usually not practical to separate the two. If there is a choice of sites, however, a teacher should carefully consider the possibilities. It is preferable that the teacher and students stay at the dig site for the duration of the project. If this is not possible, the site needs to be in close proximity to the home community and school. Otherwise, valuable time will be spent in transit instead of archaeology. Also, a "wet" site (where there are water sources located at the dig) is preferable to a "dry" one. Dry sites present problems with everyday activities such as washing, cooking, and even brushing teeth. There will also be a problem with providing sufficient quantities of drinking water. Another consideration, if there is a choice, is a dig site with shade trees. Having trees to provide relief from the afternoon sun will be appreciated.

When the list of prospective archaeologists has been completed, the next step is for the teacher to approach each one with the proposal. Having untrained high school students on a dig may not appeal to every archaeologist. A teacher is more likely to meet with a favorable response if the plans are clear and precise, and provide for flexibility in scheduling the program. If an archaeologist is offered only one time period, there may be no alternative but to refuse the opportunity to participate in this cooperative venture.

A program of this nature is beneficial to the teacher and students, as well as the archaeologist. The labor of strong, healthy, and eager young people is offered in exchange for on-site instruction and real archaeological experience under professional direction. In the interest of the students, however, it should be made clear in the beginning of the relationship with the archaeologist that the students are not slaves. They must receive instruction and experience in all facets of the dig in exchange for their ef-

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Above: First, the topsoil is removed from the site.

Right: Loose dirt is transported by wheelbarrow and then carefully sifted through a screen mesh.

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24

forts. This understanding will help to make up for those days of shovelling sterile dirt.

Once an archaeologist has been secured and arrangements have been made, the next step is the preparation phase of the program. The attention given to planning and preparation of such an extensive program can determine the extent of its success, both in terms of having a problem-free environment and in achieving a significant educational experience for the students. The rules of the game are simple, and following them will help create an enjoyable and worthwhile program. The rules are: know yourself, know your students, know what will be expected of them, know the site, and plan accordingly.

Everyone involved in the program should realize that archaeology is often hot, dirty, and frequently monotonous work. It is not the place for the faint of heart, nor for lazy and sun-loving teenagers (or adults). It is essential that the teacher evaluate his own knowledge and capabilities, and then determine an appropriate role for himself on the dig. Students and teachers will come to the program with different levels of knowledge, skills, experience, and maturity. Every participant will have his own expectations and pre-conceived notions about the dig experience. Interest and enthusiasm will vary from person to person as they face each chore, and every task on the dig will challenge in a different way. All of these problems will need to be considered when a teacher selects students and conducts the pre-dig orientation.

Assuming that student interest has already been aroused, recruitment for the program should require only a minimal amount of publicity in the school. A crew of fifteen to twenty students is adequate for a week of excavation. Less than fifteen may limit the amount of work that is accomplished at the site; more than twenty may cause crowded conditions, unless the site is large.

When preparing students for the dig, a teacher will need to anticipate possible outcomes. The excitement of the dig may result from **not** finding anything at the site, thereby disproving accepted theories. Although, generally, artifacts will be found and the students will be asked to help with cleaning and classifying such items as pottery, bone fragments, charcoal, and skeletons. Rarely is a site a treasure-trove of artifacts that can simply be picked up. The site must be excavated, regardless of the outcome, and this can mean days of tedious and relatively unproductive digging. Boredom and disappointment can be dreadful enemies to the success of the program, and pre-dig preparation should give serious attention to dealing with them.

If plans call for staying at the site for the duration of the program, certain equipment and materials are essential for insuring a safe, healthy, and productive environment. Some of these items may be provided by the archaeologist and the professional team, but the teacher may need to ask students to help with this "shopping list." It may also be necessary to charge a small participation fee to defray the increased costs required to sustain them at the site. In either case, plan for having the following:

1. Tents—small, personal tents for sleeping and large tarpaulins for cooking, eating, and lab areas
2. Latrine covers and lime for latrines (unless permanent or portable facilities will be available at the site)
3. First aid—be prepared for the worst with an abundance of first aid supplies and by knowing the shortest route to the nearest doctor and hospital; be certain to have written parental permission allowing emergency medical care to be administered, have a list of all medications the students are taking, and the sources of allergic reactions of each participant
4. Digging equipment—both round and flat edged shovels, mattocks, and files
5. Kitchen equipment—large pots and skillets, ladles, large spoons and mixing bowls, a coffee pot, water jugs, ice chests, Coleman-type stoves and lanterns, plates, cups, utensils, towels, and large kettles (all cooking and eating utensils must be boiled to prevent the spread of disease and infection)
6. Food—to prevent illness, it will be necessary to provide a balanced diet which includes plenty of fresh fruit; check with the school's dietician about buying food in bulk quantities.

There are several sources that may be able to help with these supplies. Agencies such as the local scouting associations, the National Guard, and area universities, especially R.O.T.C. units, may be able to provide tents, and cooking and camping equipment. Large tents may also be available from local mortuaries. Students can find digging equipment in their own home tool sheds. The teacher need only

describe what is required, and then enlist the help of students and their parents to find it.

Once these supplies and equipment have been procured, the students should be advised that they will need to provide the following items for their personal use at the site:

1. clean clothes sufficient for the duration of the dig (cleanliness is essential for this type of program)
2. sun screen (a simple suntan lotion will not suffice)
3. a brimmed hat or cap (to shade the eyes and face)
4. garden or work gloves (blisters can be a major problem without them)
5. soap (Ivory works best because it floats and bathing may be in a stream or river)
6. towels and a bathing suit
7. a sturdy drinking cup (such as a Sierra-type cup)
8. a folding cot or sleeping bag
9. a flashlight (to find the way to the latrine at night)
10. pencils or pens and notebooks
11. cards, guitars, or other diversions (since most of the work ends at sunset)
12. a camera and a supply of film
13. a 6" Marshal Towne trowel (pointed and flat)

These are essential "tools of the trade." The teacher should be certain that every student has these items before leaving for the dig site. Borrowing can be an irritation and may lead to squabbling or other divisive problems.

Just as important as having the proper materials is attending to the human element. Students and their parents are just as much a part of the preparation as is the equipment. In the early stages, at least one meeting should be planned for students who are interested in participating in the program. Their parents should be required to attend this meeting as a condition of the students being accepted as participants. The purpose of this first session should be to introduce parents and students to the program, and to outline the goals, activities, risks, and safeguards. This is also a time to answer questions and allay fears. This meeting provides the teacher with an excellent opportunity to secure written permission from the parents allowing the students to participate. This is essential for the protection of everybody involved, especially the teacher and the school. Either at this meeting or a later one, it will be necessary to obtain emergency health and medical information, including insurance and hospitalization data, and parental permisson for emergency medical care. Obviously, it is better to have this information and not need it, than to need it and not have have it. The health and safety of the students is the primary responsibility of the teacher, and no students should be allowed to leave the dig site unless this information has been obtained.

Once all of these matters have been settled, the teacher must turn his attentions to the educational aspects of the dig, because this is, after all, the reason for having the program. As with any educational experience, the first element is to develop a clear statement of goals and objectives, and to communicate them to the students. After the experience and capabilities of the participants have been evaluated, the next step is to provide them with adequate preparation and orientation that addresses their individual needs and differences. Much of this should be accomplished before leaving for the dig. The teacher may want to plan several sessions that include a general introduction to archaeology, a review of the procedures and techniques employed by archaeologists, health and sanitation rules, safety and emergency procedures, rules of conduct, and any other information deemed pertinent. Additional orientation and instruction should be conducted at the dig site. As part of the program, the teacher may also want to plan for orientation meetings each morning and debriefing sessions at the end of each working day. These sessions could also include the archaeologist or members of the professional team.

Once at the dig, tasks should be assigned to the students according to their capabilities. As their skills progress and interests develop, it is beneficial to reassign tasks in order to provide each student with a broad base of experiences. It may also be advisable to allow some students to specialize in a par-

ticular archaeological task. In either case, the teacher needs to provide a way for the students to pursue their individual interests. Research on field trip education has shown that motivated inquiry is a most effective method for achieving a significant learning experience.[2] The teacher should capitalize on the individual interests of the students to maximize the educational benefits of the dig experience.

As in the classroom, the students will be acquiring new information and skills, developing new concepts, analyzing, generalizing, and making inferences. As with a classroom instructional unit, the students need to be provided with a structure for learning while at the dig site. In order to insure the proper educational environment, the teacher will need to describe for the students a means for organizing and recording their experiences and observations, as well as a way to evaluate the dig experience. Journals, worksheets, directed inquiry assignments, discussion and debriefing sessions, demonstrations, and other familiar classroom activities can easily be adapted for use in the field setting. It is important to remember, however, that a great deal of learning will be achieved in a very informal and individual way, as the teacher and members of the archaeological team work with the students.

Finally, any learning experience needs to be brought to closure. The teacher will need to plan summary activities which will be conducted after the completion of the dig experience. Students will need the opportunity to review what they have done, synthesizing their experiences and articulating it for their own and the teacher's benefit. This experience should be the culmination of the program.

Obviously, planning and conducting an archaeological program for students, like any successful educational experience, requires a great deal of time and effort. No one said that it would be easy. In order to facilitate matters, a teacher may want to consider developing a manual for the students or adapting existing materials.[3] This could be a significant contribution to the program for both the student and the teacher, as well as the archaeologist. In fact, the archaeologist may have a manual or be willing to assist with developing one for high school students. Another way to enhance the program would be to ask school officials to recognize it for enrichment credit. Many states and school systems encourage enrichment programs, and an archaeological dig is an ideal enrichment activity. If graduation credit were granted, this would be an added incentive and a tangible reward to the students for their efforts. A single letter of request to the principal or superintendent, accompanied by an outline of the program, might accomplish this task.

During the summers of 1980 and 1981, programs similar to the one described in this article were implemented at McGill-Toolen High School (Mobile, Alabama). The first one, in 1980, involved the excavation of a sixteenth century Urn Culture site that was located in west central Alabama. After a week in the field, at this "dry" site, everybody was hot, tired, and sore; but there were no serious casualties. The students had been involved with a dramatic episode in history. Barely sixteen inches under thir feet lay the remains of a very large Indian village. Twenty-two burials were uncovered, as well as various other artifacts. The students will certainly never forget this experience. The following summer, another group assisted with the excavation site of a nineteenth century massacre. Unlike the previous summer, this was not the first excavation of this site. While not as dramatic and unexpected as the earlier dig, the students who participated in this program were just as involved, recreating in their minds the events which led up to the Fort Mims Massacre. There are plans to offer an expanded program during the summer of 1982, and it will involve students from more than just the one high school. Not only is the program possible, it works![4]

Notes

[1]Pam Roberts is currently a Junior at McGill-Toolen High School. She is a veteran of two archaeological digs, and plans to participate again in the summer of 1982. As a result of these experiences in applied social studies education, she plans to pursue a college major and a career in the social sciences.

[2]Marguerite Bloomberg, "An Experiment in Museum Instruction," **Publications of the Association of Museums** 8 (1929):5.

[3]See publications by Chapman and Ferguson, by Sullivan, and by Wimberly listed in the bibliography.

[4]Additional information can be obtained from the authors at McGill-Toolen High School, 1501 Old Shell Road, Mobile, Alabama 36604.

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